

## SECTION 10425 - SIGNS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following types of signs:
  - 1. Internally illuminated pylon signs.
  - 2. Post and panel signs.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section "Temporary Facilities" for temporary project identification signs.
  - 2. Division 2 Section "Site Improvements" for roadway signs and traffic signals.
  - 3. Division 10 Section "Directories and Bulletin Boards" for building directories.
  - 4. Division 15 Section "Mechanical Identification" for labels, tags, and nameplates for mechanical equipment.
  - 5. Division 16 Section "Electrical Identification" for labels, tags, and nameplates for electrical equipment.
  - 6. Division 16 Section "Interior Lighting" for illuminated exit signs.
  - 7. See Division 16 Sections for electrical service and connections for illuminated letters.

---

### 1.3 SUBMITTALS

- A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for each type of sign specified, including details of construction relative to materials, dimensions of individual components, profiles, and finishes.
- C. Shop drawings showing fabrication and erection of signs. Include plans, elevations, and large-scale sections of typical members and other components. Show anchors, grounds, layout, reinforcement, accessories, and installation details.
  - 1. Provide message list for each sign required, including large-scale details of wording and lettering layout.
  - 2. For signs supported by or anchored to permanent construction, provide setting drawings, templates, and directions for installation of anchor bolts and other anchors.
  - 3. Templates: Furnish full-size spacing templates for individually mounted dimensional letters and numbers.
- D. Samples: Provide the following samples of each sign component for initial selection of color, pattern and surface texture as required and for verification of compliance with requirements indicated.
  - 1. Samples for initial selection of color, pattern, and texture:
    - a. Fiberglass panels: Manufacturer's color charts consisting of actual sections of material including the full range of colors available for each material required.
    - b. Aluminum: Samples of each finish type and color, on 6-inch- (150 mm) long sections of extrusions and not less than 4-inch (100 mm) squares of sheet or plate, showing the full range of colors available.
  - 2. Samples for verification of color, pattern, and texture selected and compliance with requirements indicated:

- 
- a. Fiberglass panels: Provide a sample panel not less than 8-1/2 (213 mm) inches by 11 inches (275 mm) for each material, color, texture, and pattern required. On each panel include a representative sample of the graphic image process required, showing graphic style, and colors and finishes of letters, numbers, and other graphic devices.
  - b. Aluminum: Samples of each finish type and color, on 6-inch- (150 mm) long sections of extrusions and not less than 4-inch (100 mm) squares of sheet or plate. Where finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.
  - c. Dimensional Letters: Provide full-size representative samples of each dimensional letter type required, showing letter style, color, and material finish and method of attachment.

#### 1.4 QUALITY ASSURANCE

- A. Sign Fabricator Qualifications: Firm experienced in producing signs similar to those indicated for this Project, with a record of successful in-service performance, and sufficient production capacity to produce sign units required without causing delay in the Work.
- B. Single-Source Responsibility: For each separate sign type required, obtain signs from one source of a single manufacturer.
- C. Design Concept: The Drawings indicate sizes, profiles, and dimensional requirements of signs and are based on the specific types and models indicated. Sign units by other manufacturers may be considered provided deviations in dimensions and profiles do not change the design concept. The burden of proof of equality is on the proposer.

#### 1.5 PROJECT CONDITIONS

- 
- A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication to ensure proper fitting. Show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to:
1. Manufacturers of Pylon and Panel Signs:
    - a. APCO Graphics, Inc.
    - b. ASI Sign Systems, Inc.
    - c. Charleston Industries, Inc.

### 2.2 MATERIALS

- A. Fiberglass Panels: Provide thermosetting molded polyester resin, reinforced with chopped glass fiber strands, bonded to an internal aluminum framework.
- B. Aluminum Sheet: Provide aluminum sheet of alloy and temper recommended by the sign manufacturer for the type of use and finish indicated, and with not less than the strength and durability properties specified in ASTM B 209 for 5005-H15.
- C. Aluminum Extrusions: Provide aluminum extrusions of alloy and temper recommended by the sign manufacturer for the type of use and finish indicated, and with not less than the strength and durability properties specified in ASTM B 221 for 6063-T5.



- D. Fasteners: Use concealed fasteners fabricated from metals that are not corrosive to the sign material and mounting surface.
- E. Anchors and Inserts: Use nonferrous metal or hot-dipped galvanized anchors and inserts for exterior installations and elsewhere as required for corrosion resistance. Use toothed steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.
- F. Colored Coatings for Fiberglass: Use colored coatings, including inks and paints for copy and background colors, that are recommended by fiberglass manufacturers for optimum adherence to acrylic surface and are non-fading for the application intended.
- G. Project Conditions: Signage panels to be engineered and warranted for 100 mile per hour (160 kilometer per hour) windload.

## 2.3 PANEL SIGNS

- A. Panel Signs: Comply with requirements indicated for materials, thickness finishes, colors, designs, shapes, sizes, and details of construction.
  - 1. Produce smooth, even, level sign panel surfaces, constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch (2 mm) measured diagonally.
- B. Panel Signs: Fabricate signs with edges mechanically and smoothly finished.
- C. Brackets: Fabricate brackets and fittings for bracket-mounted signs from extruded aluminum to suit sign panel construction and mounting conditions indicated. Factory-paint brackets in a color matching the background color of the sign panel.
- D. Graphic Content and Style: Provide sign copy that complies with the requirements indicated for size, style, spacing, content, position, material, finishes, and colors of letters, numbers, and other graphic devices. Provide degree of

---

contrast between background and characters to comply with ADA Accessibility Guidelines. Artwork to include custom graphic.

- E. Applied Copy: Frisket Graphics for pylon signs. Surface screen process with a reflective finish for post and panel signs. Apply copy to the exposed face of the sign panel.

## 2.4 FINISHES

- A. Colors and Surface Textures: For exposed sign material that requires selection of materials with integral or applied colors, surface textures or other characteristics related to appearance, provide color matches indicated, or if not indicated, as selected from the manufacturer's standards.
- B. Metal Finishes: Comply with NAAMM "Metal Finishes Manual" for finish designations and applications recommendations.
- C. Aluminum Finishes: Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes.
  - 1. Baked-Enamel Finish: AA-M4xC12C42R1x (Mechanical Finish: Manufacturer's standard, other non-directional textured; Chemical Finish: Chemical conversion coating, acid chromate-fluoride-phosphate pretreatment; Organic Coating: as specified below). Apply baked enamel in compliance with paint manufacturer's specifications for cleaning, conversion coating, and painting.
    - a. Organic Coating: Thermosetting-modified acrylic enamel primer/topcoat system complying with AAMA 603.8 except with a minimum dry film thickness of 1.5 mils (0.04 mm), medium gloss.
      - 1) Color: As selected from the manufacturer's standard colors.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. General: Locate sign units and accessories where indicated, using mounting methods of the type described and in compliance with the manufacturer's instructions.
  - 1. Install signs level, plumb, and at the height indicated, with sign surfaces free from distortion or other defects in appearance.
- B. Bracket-Mounted Units: Provide the manufacturer's standard brackets, fittings, and hardware as appropriate for mounting signs that project at right angles from walls and ceilings. Attach brackets and fittings securely to walls or ceilings with concealed fasteners and anchoring devices to comply with manufacturer's directions.

### 3.2 CLEANING AND PROTECTION

- A. After installation, clean soiled sign surfaces according to the manufacturer's instructions. Protect units from damage until acceptance by the Owner.

END OF SECTION 10425